

APPENDIX C

To the Department of Information Resources Contract for Managed Services for Information Technology DIR-SDD- 538

Services and Pricing Index

1) Equipment

Desktop Specifications		
Components	Low End-User	High End-User
Chassis Style	Small Form Factor	Minitower
Chip	Intel Pentium D or AMD equiv.	Intel Pentium D or AMD equiv.
Processor/Clock Speed	915/2.80GHz (P4 3.2GHz equiv.)	945/3.4GHz (P4 3.4GHz equiv.)
Memory	1GB	2GB
Hard Drive	80GB	160GB
Optical Drive	DVD+/-RW with software	DVD+/-RW with software
Operating System	MS Win XP Pro	MS Win XP Pro
Network Card / Sound	Integrated	Integrated
Video/Graphics	Integrated	128MB
Speakers	Internal	Internal
Floppy Drive	No	No
Keyboard	Standard 104+ USB	Standard 104+ USB
Mouse	2 Button Entry w/Scroll USB	2 Button Entry w/Scroll USB
Chassis Style	Small Form Factor	Minitower
Quantity	1	1
Per seat Annual Payment for 3 Year Term	\$290.73	\$367.34

Notebook Specifications		
Components	Low End-User	High End-User
Chip	Intel CoreDuo or AMD equiv.	Intel CoreDuo or AMD equiv.
Processor/Clock Speed	T 2300 1.66 (P M 1.86 equiv.)	T 2400 1.83 (P M 2.0 equiv.)
LCD Resolution	WXGA	WXGA
Memory	1GB	1GB
Hard Drive	60GB	60GB
Optical Drive	DVD+-RW with software	DVD+-RW with software
Operating System	Win XP Pro	Win XP Pro
Modem	Internal 56k	Internal 56k
Network Card	Integrated	Integrated
Sound / Graphics	Integrated	Integrated
Floppy Drive	No	No
AC Adapter / Battery	Yes	Yes
Wi-Fi (802.11) miniPCi card	Integrated 802.11b/g	Integrated 802.11b/g
Warranty	4 yr NBD	4 yr NBD

Quantity	1	1
Price		
Per seat Annual Payment for 3 Year Term	\$505.62	\$455.84

2) Standard Services (included in per seat pricing)

- Asset Tracking – asset tag devices at time they are put into service by CompuCom. Capture 200+ fields of asset data into a central repository and provide an electronic file of initial asset data.
- Break/Fix Vendor Owned – Upgrade to EOM's standard warranty to include same day phone response and next business day repair of the equipment. Costs for parts required due to issues other than normal wear and tear or manufacturing defect would be billed separately.
- Unwind/End of Engagement – Minimum service includes de-install from the desktop, preparation for shipment and preparation of end of lease notification paperwork to leasing company. Additional services including data transfer to central data store and shipping of equipment to the leasing company are available for an additional charge.

3) Optional Services

Each service Category below contains a Bronze, Silver and Gold level of service and pricing including the existing 0.75% DIR Administrative fee.

Service Category and Service Levels	Descriptions	Pricing				
Help Desk Services						
	<p>The scope of service for help desk service delivery as determined during this pre-sales phase for pricing purposes includes the following items:</p> <table><tr><td>Estimated Monthly Volume</td><td>Assumes industry average of 1.5 calls per end user per month Contact volume exceeds incident volume by approximately 20%</td></tr><tr><td>Level of Service</td><td><input checked="" type="checkbox"/> OnlyCALL Premier, integrates all technical support requests into CompuCom with single ownership for call receipt and extends the service to include the additional features that are checked below</td></tr></table>	Estimated Monthly Volume	Assumes industry average of 1.5 calls per end user per month Contact volume exceeds incident volume by approximately 20%	Level of Service	<input checked="" type="checkbox"/> OnlyCALL Premier, integrates all technical support requests into CompuCom with single ownership for call receipt and extends the service to include the additional features that are checked below	
Estimated Monthly Volume	Assumes industry average of 1.5 calls per end user per month Contact volume exceeds incident volume by approximately 20%					
Level of Service	<input checked="" type="checkbox"/> OnlyCALL Premier, integrates all technical support requests into CompuCom with single ownership for call receipt and extends the service to include the additional features that are checked below					

	<p>Reports</p> <p>Hours of Coverage</p> <p>Enterprise Help Desk Features Selected by Texas DIR (please refer to Appendix C for definition of the following features)</p>	<p>Standard Monthly Reports</p> <p><input checked="" type="checkbox"/> 7x24x365 <input checked="" type="checkbox"/> Continental U.S. end users only <input checked="" type="checkbox"/> English-speaking end-users only</p> <p>Service Levels: Three Options Priced Option 1: Gold Service Levels Average Speed of Answer: ≤ 30 Seconds Abandon Rate: ≤ Five percent First Call Closure for Standard Software: 85 percent Option 2: Silver Service Levels Average Speed of Answer: ≤ 60 seconds Abandon Rate: ≤ Six percent First Call Closure for Standard Software: 85 percent Option 3: Bronze Service Levels Average Speed of Answer: ≤ 90 seconds Abandon Rate: ≤ Twelve percent First Call Closure for Standard Software: 85 percent</p> <p>Transfer Type (select all that apply): <input checked="" type="checkbox"/> Electronic Ticket Transfer <input checked="" type="checkbox"/> Warm Transfer <input checked="" type="checkbox"/> CompuCom Engineer or On-site Engineer Dispatch <input checked="" type="checkbox"/> CompuCom Service Center Dispatch (laptop depot) <input checked="" type="checkbox"/> Third-party Vendor Dispatch <input checked="" type="checkbox"/> Support for Remote End-Users <input checked="" type="checkbox"/> Electronic Incident Tracking <input checked="" type="checkbox"/> Remote Control provided by client <input checked="" type="checkbox"/> Basic User Administration –.can include the following: <input checked="" type="checkbox"/> Network: PW resets/unlocks</p>		
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		<input checked="" type="checkbox"/> Mainframe: PW resets The client must provide necessary access, hardware, WAN connectivity, licensing; documented process and training. <input checked="" type="checkbox"/> FAQ support for Proprietary and/or Non-standard Applications (No closure service levels) <input checked="" type="checkbox"/> CompuCom Problem Management System		
	Gold Service Levels			
	Average Speed of Answer: ≤ 30 Seconds Abandon Rate: ≤ Five percent			\$29.19 per seat per month
	Silver Service Levels			
	Average Speed of Answer: ≤ 60 seconds Abandon Rate: ≤ Six percent			\$27.43 per seat per month
	Bronze Service Levels			
	Average Speed of Answer: ≤ 90 seconds Abandon Rate: ≤ Twelve percent			\$25.96 per seat per month
	Help Desk Connect Tool Annual Subscription Fees CompuCom's Enterprise Help Desk provides authorized end users with the ability to view, create, and update real-time information on individual problem tickets through Help Desk Connect, using Microsoft Internet Explorer. In addition, the Web site also includes a repository whereby help desk associates or authorized client personnel can view, publish, and delete client-specific or public documents and/or bulletins.			
	Request Connect via Help Desk Connect (Access to CompuCom's Problem Management System)			

	End User-Submit and/or-View	One-time set up fee: - Self-registered end-users: 1 – 500 users = \$3.00/user 501 – 3000 users = \$2.50/user 3001 and above = \$2.00/user *Self registration requires the client to have an accurate data load within the problem management system. In addition, client has no control on who can and who cannot register. **Submit and/or View access allows end users to submit their own cases and view their cases, client bulletins and client documents. ***Exceptions to this process will be priced according to requirements and completed via our change control process.		
	Administrator Case and System Management Users	First 25 IDs	Included in pricing \$200 each ID, annually	
		26 - 50 IDs		
		51 IDs and above	\$150 each ID, annually	
		Access is limited to second and third level technicians as well as managers and is not intended for use by end users. Designated personnel can view, update, and create cases for entire end user community; view, create, and post bulletins and documents; view, modify, and add external assignees to support groups.		
Help Desk Transition Cost	Transition Cost associated to the implementation of services under contract.			Not To Exceed 8% of 1st Annual Invoice
On-Site Support and Moves/Adds/Changes (MACs) Services				
Service Levels	Minimum 200 Seats smaller quantities can be addressed on a case by case basis.			
	Bronze - Deskside software support with same business phone response and next business day repair Monday-Friday 8:00am-5:00pm CST for all requests received by 3:00pm CST			\$12.27 per seat per month

	Silver - Deskside software support with 4 hour response and same business day repair Monday-Friday 8:00am-5:00pm CST for all requests received by 12:00pm CST	\$13.60 per seat per month
	Gold - Deskside software support with 2 hour on-site response and same business day repair Monday-Friday 8:00am-5:00pm CST	\$17.61 per seat per month
Remote Support Services		
Service Levels	\$175.38 minimum monthly invoice + price per asset.	
	Server Basic (Bronze) – See Service Descriptions in Exhibit 1.	\$27.40 Per Asset
	Server Performance (Silver) – See Service Descriptions in Exhibit 1.	\$82.21 Per Asset
	Server Premier (Gold) – See Service Descriptions in Exhibit 1.	\$246.63 Per Asset
Network Management Services		
Service Levels	Network Device Basic (Bronze) – See Service Descriptions in Exhibit 1 .\$175.38 minimum monthly invoice + price per asset.	\$27.40 Per Asset per month
	Network Device Performance (Silver) – See Service Descriptions in Exhibit 1.	
	Small Network Devices	\$60.29 Per Asset per month
	Medium Network Devices	\$65.77 Per Asset per month
	Large Network Devices	\$87.69 Per Asset per month
	Wireless Access Points	\$54.81 Per Asset per month
	Network Device Premier (Gold) – See Service Descriptions in Exhibit 1. Minimum monthly invoice \$175.38 + price per asset Where are these service descriptions?	
	Small Network Devices	\$98.65 Per Asset per month
	Medium Network Devices	\$109.62 Per Asset per month
	Large Network Devices	\$137.02 Per Asset per month
	Wireless Access Points	\$104.13 Per Asset per

		month
Software Services		
Service Levels	Gold – Provided by CompuCom local PSD. T&M plus travel	
	Silver – Imaging, Asset Tagging and Patch management prior to installation at a State Agency	\$40.08 per incident
	Bronze - Imaging and Asset Tagging prior to installation at a State Agency	\$33.58 per incident
	Note: Configuration Services quoted pricing for Silver and Bronze only. After base image and/or base image with patches an installation resource (IMAC) may be required to complete the application installation and data migration to complete the end user refresh process. Gold level services should be an on-site consulting engagement to design, develop and build a software deployment system; CompuCom has recommended an Altiris solution in the past for the software deployment engine. Due to the typical disparity between State Agencies multiple WAN connections to complete the end user applications is not practical. But, larger state agencies may achieve a Silver plus level or replace the gold level that may include departmental and ad-hoc installations of applications in the Configuration Center.	
Asset Tracking Services		
Service Levels	Gold – Provided by CompuCom PSD. T&M plus travel. Contact the Asset Management Practice Team.	
	Silver – Provided by CompuCom PSD. T&M plus travel. On-Site Assessment Assets	
	Bronze - Asset Tagging prior to installation at a State Agency. Tab Delimited or Comma Separated Value text file will be emailed at an agreed upon interval (daily, weekly, monthly, yearly)	\$7.04 per item or minimum order \$19.50
	Note: Configuration Services quoted pricing for Bronze only.	
Security Services		
Service Levels	Gold – Provided by CompuCom PSD. T&M plus travel. Contact the Asset Management Practice Team.	

	Silver – Provided by CompuCom PSD. T&M plus travel. On-Site Assessment Assets	
	Bronze - Warehouse only deployment of Asset without any other Configuration Services	\$12.46 per item
	Note: Configuration Services quoted pricing for Bronze only. Warehouse only pick and pack services. Other levels are CompuCom PSD Assessment and Consulting.	
Training		
Service Levels	Case by case basis.	
Standard and Ad Hoc Reporting and Documentation		
Service Levels	Bronze - Standard data available via web	Included in service
	Silver - Subscription to scheduled standard reports available via Web	Included in service
	Gold - Custom reporting	Pricing would be dependent on reporting information required and level of effort to programmatically develop report
Unwind / End of Engagement Services		
Service Levels		
	Bronze – De-install of equipment	Case by case basis determined by client specifics
	Silver – Upload of data to client central data store and de-install equipment	Case by case basis determined by client specifics
	Gold – Data transfer to new equipment, de-install of existing equipment, install of new equipment	Case by case basis determined

		by client specifics
Break-Fix/Maintenance Services – Vendor Owned Equipment		
Service Levels	Minimum 200 Seats smaller quantities can be addressed on a case by case basis.	
	Bronze - Break/Fix support with same business phone response and next business day repair Monday-Friday 8:00am-5:00pm CST for all requests received by 3:00pm CST	Desktop - \$2.05 per seat per month Laptop - \$3.84 per seat per month Low-End Printer - \$2.51 per seat per month Laser Printer - \$3.69 per seat per month Network Printer - \$4.14 per seat per month
	Silver - Break/Fix support with 4 hour response and same business day repair Monday-Friday 8:00am-5:00pm CST for all requests received by 12:00pm CST	Desktop - \$3.81 per seat per month Laptop - \$6.59 per seat per month Low-End Printer - \$3.11 per seat per month Laser Printer - \$5.29 per seat per month Network Printer - \$7.16 per seat per month
	Gold - Break/Fix support with 2 hour on-site response	Desktop -

	and same business day repair Monday-Friday 8:00am-5:00pm CST	\$4.55 per seat per month Laptop - \$7.78 per seat per month Low-End Printer - \$3.81 per seat per month Laser Printer - \$6.30 per seat per month Network Printer - \$8.47 per seat per month
Break-Fix/Maintenance Services – Customer Owned Equipment		
Service Levels	Minimum 200 Seats smaller quantities can be addressed on a case by case basis.	
	Bronze - Break/Fix support with same business phone response and next business day repair Monday-Friday 8:00am-5:00pm CST for all requests received by 3:00pm CST	Desktop - \$2.05 per seat per month Laptop - \$3.84 per seat per month Low-End Printer - \$2.51 per seat per month Laser Printer - \$3.69 per seat per month Network Printer - \$4.14 per seat per month
	Silver - Break/Fix support with 4 hour response and same business day repair Monday-Friday 8:00am-5:00pm CST for all requests received by 12:00pm CST	Desktop - \$3.81 per seat per month

		Laptop - \$6.59 per seat per month Low-End Printer - \$3.11 per seat per month Laser Printer - \$5.29 per seat per month Network Printer - \$7.16 per seat per month
	Gold - Break/Fix support with 2 hour on-site response and same business day repair Monday-Friday 8:00am- 5:00pm CST	Desktop - \$4.55 per seat per month Laptop - \$7.78 per seat per month Low-End Printer - \$3.81 per seat per month Laser Printer - \$6.30 per seat per month Network Printer - \$8.47 per seat per month

SERVICE DESK PRICING ASSUMPTIONS

The following list contains the assumptions used to develop CompuCom's Enterprise Help Desk pricing.

1. The guaranteed monthly user volume will be billed regardless of your actual usage.
2. Pricing is based on a 3 year contract term. Pricing is fixed for 90 days from the date of this pricing proposal and shall expire unless accepted within that timeframe.
3. Pricing is based on 1.5 contacts per user per month and 1.2 incidents per user per month. If incidents and/or calls/events exceed this assumption by more than 20 percent for one month, then service levels as documented in the Service Level Agreement are relieved for that month (considered to have been met in their entirety for the month).

4. If incidents and/or calls/events exceed the average daily volume (based on the minimum monthly guarantee) by more than 20 percent for that day then service levels are relieved for that day (considered to have been met in their entirety). Any day in the month exceeding the average daily incident and/or call volume as stated above will not be factored in when calculating the monthly service levels.
5. If incidents and/or calls/events exceed the above mentioned 20 percent threshold for three consecutive months, pricing and minimum commitment will be reviewed and possibly adjusted.
6. CompuCom strives to achieve all contracted Service Level Agreements from the start of the agreement, however, CompuCom is contractually relieved of Service Level Agreements for the first 90 days after go live.
7. Users exceeding the agreed upon monthly user commitment, will be billed at the stated price per user. When new users are added to the support contract, the same call/incident rate per user assumption will be utilized to adjust the monthly volume amount, and the reverse situation would also apply. On a quarterly basis CompuCom will request an updated user count from Texas DIR to ensure pricing is accurate.
8. Pricing assumes no more than 10% of contact or incident volume will fall during the extended hours timeframe. "Extended hours" is defined as 9pm thru 6am Monday thru Thursday and 9pm Friday thru 6am Monday (Central Time). If volumes exceed or fall below this assumption by more than 5%, pricing will be reviewed and adjusted.
9. Pricing assumes less than 5% of total event volume is submitted via email. If email submissions exceed this volume assumption by more than 10%, pricing will be reviewed and adjusted.
10. Pricing includes support for proprietary and/or non-standard applications on a commercially reasonable effort. It is the client's responsibility to include frequently asked questions, initial training, copies of the respective software and a point of transfer prior to CompuCom providing support. Commercially reasonable effort is defined as troubleshooting and providing support utilizing available expertise and knowledge base information. Service levels are not applicable for products in this category
11. Pricing assumes all end-users will be English-speaking and client is responsible for all fees associated with international calling. If translation services are required, client is also responsible for the cost of hook up and translation fees.
12. The price per incident includes a dedicated U.S. toll-free number with a customized greeting and menu. As an optional service, Texas DIR can select an Automated Call Distribution (ACD) forward to a U.S. toll-free number for an additional fee of \$350.00 per connection per month. For an ACD forward to a DID number, the monthly fee is based on volume through the switch. Pricing for 250 calls or less is \$350 per month, 251 to 500 calls is \$600 per month, and 501 to 1,000 calls is \$1,200 per month. Any volume above 1,000 calls a month forwarded through the ACD requires an 800 number. ACD forward capability allows CompuCom's Enterprise Help Desk to route telephone menu options directly back to client-specified support groups and/or third party support providers, via a toll-free number(s).
13. Pricing assumes an average monthly handle time of 9 minutes or less per call. If average monthly handle time exceeds this assumption, pricing may be adjusted.
14. Pricing includes monthly standard reports. Other custom reports can be arranged for an additional charge.
15. Pricing does not include an electronic interface of CompuCom's problem management system with a client's problem management system. An electronic interface of problem management systems can be reviewed and priced upon request.

16. Pricing is based on up to ten client-specified escalation/transfer groups. Every group is allowed two to three layers of contact, depending on the priority level of the problem. If the number of escalation/transfer groups exceeds this amount, pricing will be adjusted accordingly.
17. Pricing does not include Remote Network Systems Support (telephone support on network related equipment such as servers, network operating systems, and physical layer equipment). CompuCom's Enterprise Help Desk will transfer calls addressing network equipment issues back to Texas DIR or the designated support group.
18. If WAN connectivity between CompuCom and Customer is required (i.e. for password resets, remote desktop control, etc.), pricing does not include any associated equipment costs (i.e. agent PC's, routers, hubs, circuits, etc.). The client will own and maintain all associated equipment and costs.
19. Implementation costs are not included in the price per seat and are billed separately. Travel expenses related to implementation activity will be pre-approved and billable to Customer pursuant to DIR-SDD-538.
20. The implementation fee includes two resources and allows for up to three days of on-site discovery at the client's location and a total implementation timeframe not to exceed 12 weeks.

SOFTWARE/ASSET TRACKING/SECURITY PRICING ASSUMPTIONS AND CONSIDERATIONS

1. Pricing is based on 21 minutes of configuration time which includes a 3.5 GB image.
2. Integration Center Management must approve all pricing changes.
3. Additional post image customizations not defined in the services matrix will increase the pricing in relation to the time to configure.
4. A First Article order is required to setup, document, control, and certify a client image/process for mass deployment. This proof of concept order requires 48 hours or two business days to process and requires client consent before releasing any future orders to the Integration Center. Changes to an existing configuration require a First Article Update order to document, control and certify the changes to the process. Changes can include a new image, new hardware specification including model changes associated with processor speed change, hard drive size or any other hardware specification changes that do not affect the image. All part number changes require a validation from Paulsboro's Integration Center lab before release to production. If the client is moving to a new model and a new image is required a new First Article order is required.
5. The First Article retail price is \$200 and the update retail price will be \$100.
6. This pricing assumes that the customer will either create the image or give us a pre-built system that is ready to be imaged.
7. Fees represented in this document do not include order management or transportation logistics.
8. Product not purchased from CompuCom, classified as Customer Supplied Product (CSP), may require a one-time handling fee of \$3.25 per serialized item and \$1.65 for non-serialized items which includes storage for up to 30 days. After 30 days of warehousing, a storage rate of \$28.00 per pallet may be requested.
9. Bill and Hold product starts incurring warehouse storage after 30 days, a storage rate of \$28.00 per pallet applies.
10. CompuCom's standard burn-in period is limited to the time the system is on the bench during configuration. The DOA rate for tier one product is less than 1% and most of these units fail due to damage during shipment to CompuCom. Since most

system failures occur within moments of initial power-up, longer burn-in periods are neither warranted nor cost effective. However, special arrangements can be made for those customers who insist on longer burn-in periods.

11. Asset tagging with the associated reporting is an additional \$3.50 per tagged item with other Configuration Services. A discount was applied to the base system service fee since all units are asset tagged. Client must provide Asset Tags.
12. Stand-alone asset tagging with associated reporting is an additional \$6.50 per unit. Monitors and peripherals tagged with an imaged system are billed at \$3.50 per tagged item. The pick and pack fee applies to any single unit stand-alone asset tag order.
13. Custom printed Asset Tags or labels are available, a custom quote will be provided when the specifications are provided.
14. A minimum order fee of \$11.50 is established for pick and pack only orders.
15. An image is defined as a physical snapshot of a hard drive that is taken from a customer's 'golden system' with a utility such as Ghost and copied/cloned to like systems.
16. Service Level Objectives with 95% compliance.
 - The standard Service objective for Pick and Pack orders is next business day shipment.
 - The standard Service objective for standard Configuration orders is two business days from receipt of order to shipment.
 - The standard Service objective for Advanced Configuration orders is three business days from receipt of order to shipment.
17. Expedite Fee Structure.

Integration Services will commit to 99.5% same day shipment SLA for all approved expedited orders. Same day orders not approved will be considered for next day processing.

- **Pick and Pack**

- Cut off Time – 3:00 p.m. Central time
- Requests must be submitted by the cut-off time.

\$20	Warehouse Expedite Level 1	Includes up to 15 items on the order
\$40	Warehouse Expedite Level 2	Includes up to 30 items on the order
\$75	Warehouse Expedite Level 3	Includes up to 70 items on the order

- **Standard Configuration**

- Cut off Time – 1:00 p.m. Central time
- Requests must be submitted by the cut-off time.

\$35	Configuration Expedite Level 1	Up to 5 Configured items
\$75	Configuration Expedite Level 2	Up to 15 Configured items
\$150	Configuration Expedite Level 3	Up to 30 Configured items

- **Advanced Configuration**
 - Cut off Time – 1:00 p.m. Central time
 - Requests must be submitted by the cut-off time.
 - All requests for these types of orders will be submitted to the Integration Center for approval prior to being placed on escalation.
 - The Integration Center will communicate the expected ship date based on the complexity of the order.
 - Expedite fees are hourly cost based on the complexity of the request. The Integration Center will communicate the fee with the expected ship date.

BREAK/FIX AND SOFTWARE SUPPORT PRICING ASSUMPTIONS:

- Hours of Coverage: Monday - Friday, 8am to 5pm US Central time zone
- Service levels for Software support calls, Bronze - CompuCom will respond within 8 business hours and will restore to operation Next Business Day
- Silver - CompuCom will respond within 4 business hours and will restore to operation Same Business Day
- Gold - CompuCom will respond within 2 business hours and will restore to operation Same Business Day
- Next Business Day restore requires service calls be received by Noon, Local Time
- 100 locations; approximately 90% of equipment is located within 50 miles of a CompuCom SLC
- Warranty Assumption: 90% of PC equipment and Printers are covered by an OEM warranty throughout the contract
- One Seat = One PC
- Per Seat/User price includes Hardware Support, Software Support, and IMAC services
- Prices are contingent upon award of all service components
- Prices assume all equipment is Tier One and supported by CompuCom
- For Dell break/fix support, Customer will need to submit to Dell the Dell WPD enrollment application designating CompuCom as your Customer Appointed Service Provider. For other Tier 1 equipment covered under this contract, no enrollment application is required.
- Average call duration for all dispatched calls is 1.5 hours

4) Volume Discounts

The pricing below is indicative of pricing available if a suite of services is requested with a minimum configuration of Help Desk Services, Remote Support Services, On-Site Support and Network Management Services.

Service Category and Service Levels	Descriptions	Pricing
Help Desk Services		
	Please Refer to Service Desk Scope of Service Table Below	
	Gold - Average Speed of Answer: ≤ 30 Seconds Abandon Rate: ≤ Five percent	\$27.41 per seat per month
	Silver - Average Speed of Answer: ≤ 60 seconds	\$25.76 per seat per month

	Abandon Rate: ≤ Six percent	
	Bronze - Average Speed of Answer: ≤ 90 seconds Abandon Rate: ≤ Twelve percent	\$24.38 per seat per month
	Help Desk Transition Cost Transition Cost associated to the implementation of services under contract.	Not To Exceed 8% of 1st Annual Invoice
On-Site Support and Moves/Adds/Changes (MACs) Services		
Service Levels	Minimum 200 Seats smaller quantities can be addressed on a case by case basis.	
	Bronze - Deskside software support with same business phone response and next business day repair Monday-Friday 8:00am-5:00pm CST for all requests received by 3:00pm CST	\$11.32 per seat per month
	Silver - Deskside software support with 4 hour response and same business day repair Monday-Friday 8:00am-5:00pm CST for all requests received by 12:00pm CST	\$12.55 per seat per month
	Gold - Deskside software support with 2 hour on-site response and same business day repair Monday-Friday 8:00am-5:00pm CST	\$16.25 per seat per month
Remote Support Services		
Service Levels	\$160.00 minimum monthly invoice + price per asset.	
	Server Basic (Bronze) – See Service Descriptions	\$25.00 Per Asset per month
	Server Performance (Silver) – See Service Descriptions	\$75.00 Per Asset per month
	Server Premier (Gold) – See Service Descriptions	\$225.00 Per Asset per month
	Additional Services – See Service Descriptions	Provided on request
Network Management Services		
Service Levels	Network Device Basic (Bronze) – See Service Descriptions \$175.38 minimum monthly invoice + price per asset.	\$25.00 Per Asset per month
	Network Device Performance (Silver) – See Service Descriptions	
	Small Network Devices	\$55.00 Per Asset per month
	Medium Network Devices	\$60.00 Per Asset per month
	Large Network Devices	\$80.00 Per Asset per month
	Wireless Access Points	\$50.00 Per Asset per month
	Network Device Basic (Bronze) – See Service Descriptions \$160.00 minimum monthly invoice	\$25.00 Per Asset per month

	+ price per asset.	
	Small Network Devices	\$90.00 Per Asset per month
	Medium Network Devices	\$100.00 Per Asset per month
	Large Network Devices	\$125.00 Per Asset per month
	Wireless Access Points	\$95.00 Per Asset per month
	Additional Services – See Service Descriptions	Provided on request
Software Services		
Service Levels	Gold – Provided by CompuCom local PSD. T&M plus travel	
	Silver – Imaging with Asset Tag & Patch Management	
	Imaging, Asset Tagging and Patch management prior to installation at a State Agency	\$37.00 per incident
	Bronze - Imaging with Asset Tag	
	Imaging and Asset Tagging prior to installation at a State Agency	\$31.00 per incident
	Note: Configuration Services quoted pricing for Silver and Bronze only. After base image and/or base image with patches an installation resource (IMAC) may be required to complete the application installation and data migration to complete the end user refresh process. Gold level services should be an on-site consulting engagement to design, develop and build a software deployment system; CompuCom has recommended an Altiris solution in the past for the software deployment engine. Due to the typical disparity between State Agencies multiple WAN connections to complete the end user applications is not practical. But, larger state agencies may achieve a Silver plus level or replace the gold level that may include departmental and ad-hoc installations of applications in the Configuration Center.	
Asset Tracking Services		
Service Levels	Gold – Provided by CompuCom PSD. T&M plus travel. Contact the Asset Management Practice Team.	
	Silver – Provided by CompuCom PSD. T&M plus travel. On-Site Assessment Assets	
	Bronze - Asset Tagging prior to installation at a State Agency. Tab Delimited or Comma Separated Value text file will be emailed at an	\$6.50 per incident or minimum order

	agreed upon interval (daily, weekly, monthly, yearly)	\$18.00
	Note: Configuration Services quoted pricing for Bronze only.	
Security Services		
Service Levels	Gold – Provided by CompuCom PSD. T&M plus travel. Contact the Asset Management Practice Team.	
	Silver – Provided by CompuCom PSD. T&M plus travel. On-Site Assessment Assets	
	Bronze – Warehouse only deployment of Asset without any other Configuration Services	\$11.50 per incident
	Note: Configuration Services quoted pricing for Bronze only. Warehouse only pick and pack services. Other levels are CompuCom PSD Assessment and Consulting.	
Training		
Service Levels	Case by case basis.	
Standard and Ad Hoc Reporting and Documentation		
Service Levels	Bronze - Standard data available via web	Included in service
	Silver - Subscription to scheduled standard reports available via Web	Included in service
	Gold - Custom reporting	Pricing would be dependent on reporting information required and level of effort to programmatically develop report
Unwind / End of Engagement Services		
Service Levels	Case by case basis.	
	Bronze – De-install of equipment	Case by case basis determined by client specifics
	Silver – Upload of data to client central data store and de-install equipment	Case by case basis determined by client specifics
	Gold – Data transfer to new equipment, de-install of existing equipment, install of new equipment	Case by case basis determined by client specifics
Break-Fix/Maintenance Services – Vendor		

Owned Equipment		
Service Levels	Minimum 200 Seats smaller quantities can be addressed on a case by case basis.	
	Bronze - Break/Fix support with same business phone response and next business day repair Monday-Friday 8:00am-5:00pm CST for all requests received by 3:00pm CST	Desktop - \$1.89 per seat per month Laptop - \$3.55 per seat per month Low-End Printer - \$2.32 per seat per month Laser Printer - \$3.41 per seat per month Network Printer - \$3.82 per seat per month
	Silver - Break/Fix support with 4 hour response and same business day repair Monday-Friday 8:00am-5:00pm CST for all requests received by 12:00pm CST	Desktop - \$3.52 per seat per month Laptop - \$6.08 per seat per month Low-End Printer - \$2.87 per seat per month Laser Printer - \$4.89 per seat per month Network Printer - \$6.61 per seat per month
	Gold - Break/Fix support with 2 hour on-site response and same business day repair Monday-Friday 8:00am-5:00pm CST	Desktop - \$4.20 per seat per month Laptop - \$7.18 per seat per month Low-End Printer - \$3.52 per seat per month Laser Printer - \$5.82 per seat per month Network Printer - \$7.82 per seat per month
Break-Fix/Maintenance Services – Customer Owned Equipment		
Service Levels	Minimum 200 Seats smaller quantities can be addressed on a case by case basis.	

	Bronze - Break/Fix support with same business phone response and next business day repair Monday-Friday 8:00am-5:00pm CST for all requests received by 3:00pm CST	Desktop - \$1.89 per seat per month Laptop - \$3.55 per seat per month Low-End Printer - \$2.32 per seat per month Laser Printer - \$3.41 per seat per month Network Printer - \$3.82 per seat per month
	Silver - Break/Fix support with 4 hour response and same business day repair Monday-Friday 8:00am-5:00pm CST for all requests received by 12:00pm CST	Desktop - \$3.52 per seat per month Laptop - \$6.08 per seat per month Low-End Printer - \$2.87 per seat per month Laser Printer - \$4.89 per seat per month Network Printer - \$6.61 per seat per month
	Gold - Break/Fix support with 2 hour on-site response and same business day repair Monday-Friday 8:00am-5:00pm CST	Desktop - \$4.20 per seat per month Laptop - \$7.18 per seat per month Low-End Printer - \$3.52 per seat per month Laser Printer - \$5.82 per seat per month Network Printer - \$7.82 per seat per month

SERVICE DESK PRICING ASSUMPTIONS

The following list contains the assumptions used to develop CompuCom's Enterprise Help Desk pricing.

1. The guaranteed monthly user volume will be billed regardless of your actual usage.
2. Pricing is based on the award of all service components.
3. Pricing is based on a 3 year contract term. Pricing is fixed for 90 days from the date of this pricing proposal and shall expire unless accepted within that timeframe.

4. Pricing is based on 1.5 contacts per user per month and 1.2 incidents per user per month. If incidents and/or calls/events exceed this assumption by more than 20 percent for one month, then service levels as documented in the Service Level Agreement are relieved for that month (considered to have been met in their entirety for the month).
5. If incidents and/or calls/events exceed the average daily volume (based on the minimum monthly guarantee) by more than 20 percent for that day then service levels are relieved for that day (considered to have been met in their entirety). Any day in the month exceeding the average daily incident and/or call volume as stated above will not be factored in when calculating the monthly service levels.
6. If incidents and/or calls/events exceed the above mentioned 20 percent threshold for three consecutive months, pricing and minimum commitment will be reviewed and possibly adjusted.
7. CompuCom strives to achieve all contracted Service Level Agreements from the start of the agreement, however, CompuCom is contractually relieved of Service Level Agreements for the first 90 days after go live.
8. Users exceeding the agreed upon monthly user commitment, will be billed at the stated price per user. When new users are added to the support contract, the same call/incident rate per user assumption will be utilized to adjust the monthly volume amount, and the reverse situation would also apply. On a quarterly basis CompuCom will request an updated user count from Customer to ensure pricing is accurate.
9. Pricing assumes no more than 10% of contact or incident volume will fall during the extended hours timeframe. "Extended hours" is defined as 9pm thru 6am Monday thru Thursday and 9pm Friday thru 6am Monday (Central Time). If volumes exceed or fall below this assumption by more than 5%, pricing will be reviewed and adjusted.
10. Pricing assumes less than 5% of total event volume is submitted via email. If email submissions exceed this volume assumption by more than 10%, pricing will be reviewed and adjusted.
11. Pricing includes support for proprietary and/or non-standard applications on a commercially reasonable effort. It is the client's responsibility to include frequently asked questions, initial training, copies of the respective software and a point of transfer prior to CompuCom providing support. Commercially reasonable effort is defined as troubleshooting and providing support utilizing available expertise and knowledge base information. Service levels are not applicable for products in this category
12. Pricing assumes all end-users will be English-speaking and client is responsible for all fees associated with international calling. If translation services are required, client is also responsible for the cost of hook up and translation fees.
13. The price per incident includes a dedicated U.S. toll-free number with a customized greeting and menu. As an optional service, Texas DIR can select an Automated Call Distribution (ACD) forward to a U.S. toll-free number for an additional fee of \$350.00 per connection per month. For an ACD forward to a DID number, the monthly fee is based on volume through the switch. Pricing for 250 calls or less is \$350 per month, 251 to 500 calls is \$600 per month, and 501 to 1,000 calls is \$1,200 per month. Any volume above 1,000 calls a month forwarded through the ACD requires an 800 number. ACD forward capability allows CompuCom's Enterprise Help Desk to route telephone menu options directly back to client-specified support groups and/or third party support providers, via a toll-free number(s).
14. Pricing assumes an average monthly handle time of 9 minutes or less per call. If average monthly handle time exceeds this assumption, pricing may be adjusted.

15. Pricing includes monthly standard reports. Other custom reports can be arranged for an additional charge.
16. Pricing does not include an electronic interface of CompuCom's problem management system with a client's problem management system. An electronic interface of problem management systems can be reviewed and priced upon request.
17. Pricing is based on up to ten client-specified escalation/transfer groups. Every group is allowed two to three layers of contact, depending on the priority level of the problem. If the number of escalation/transfer groups exceeds this amount, pricing will be adjusted accordingly.
18. Pricing does not include Remote Network Systems Support (telephone support on network related equipment such as servers, network operating systems, and physical layer equipment). CompuCom's Enterprise Help Desk will transfer calls addressing network equipment issues back to Texas DIR or the designated support group.
19. If WAN connectivity between CompuCom and Texas DIR is required (i.e. for password resets, remote desktop control, etc.), pricing does not include any associated equipment costs (i.e. agent PC's, routers, hubs, circuits, etc.). The client will own and maintain all associated equipment and costs.
20. Implementation costs are not included in the price per seat and are billed separately. Travel expenses related to implementation activity will be pre-approved and billable to Texas DIR.
21. The implementation fee includes two resources and allows for up to three days of on-site discovery at the client's location and a total implementation timeframe not to exceed 12 weeks.

Exhibit 1. Service Descriptions

Server Basic Level Support

The Server Basic level monitoring provides real time availability and fault monitoring of server system hardware. Availability and fault monitoring will provide alerts and notification of such things as power supplies, hard disk failures, and other system level components.

Server Basic:

24x7 fault and availability monitoring of servers

Main features include:

- 24x7 monitoring – including detection of loss of visibility, device status changes.
- Hardware failure if configured to forward traps.
- Maintain Database of monitored devices.
- Change Control for scheduled activity on monitored devices.
- Event correlation – reduces alerts generated during major outage.
- Web based portal – provides real time dashboard incident/problem identification by organization, location, priority and category.
- Standard Reports:
 - Requests by priority (with drill down)
 - Requests by request area (with drill down)
 - Service level agreement (“SLA”) achievement (with drill down) NOTE: SLA criteria definition will be determined and mutually agreed upon by ‘Client’ and COMPUCOM during creation of service types.
 - Service level agreement achievement by support group.
 - Initial average speed of response reports per priority or request area
 - Average time to closure report per priority or request area
- Fault notification and basic triage
- Repair escalation and dispatch
- Automated Workflow processes and procedures will be established through mutual agreement of the customer and EOC.

Basic Level Monitoring provides availability monitoring and SNMP fault alert monitoring and management. All of the supported servers will be monitored for availability using ICMP. Based on the support requirements for the server asset, additional fault alerts from server vendor’s hardware management applications, such as HP’s Systems Insight Manager (SIM). Fault alerts cover hard disk failures, power supply failures, memory errors, cpu faults and any other hardware level faults that are provided by the vendor. The fault alerts are forwarded to the EOC Management Probe described below (Implementation and Startup).

The alert will be processed through the alert integration and problem management systems and a Service Request opened. Based on the defined Workflow processes and procedures, the Service Request will be escalated to appropriate support personnel. If on-site personnel are not available then the appropriate personnel will be dispatched to repair the faulted system.

Blade Server implementations consist of a blade server chassis and multiple server blades in the chassis. The chassis provides power, a common CD ROM, common monitor and keyboard and common communications to a LAN module and a GBE/10GBE/Fibre Channel SAN switch module. The hardware functions in the blade server chassis will be monitored at the Basic fault and availability level using the hardware support and management application from the vendor.

Systems that have been designated as “End Of Life” by the source vendor will be supported on a best effort basis.

Authorized and trained Client personnel will be able to utilize the support management system to perform real-time ad hoc queries to view virtually unlimited views of event, service performance, and other information. These reports are printable from a browser, and may be directed to a file for 'Client processing.

Reports that require customization will be provided upon request and review. Depending upon complexity, COMPUCOM reserves the right to provide Client an estimate of effort with fair charges to create and maintain these custom reports.

Server Performance Level Support

The Server Performance level monitoring provides real time availability and fault monitoring of server system hardware along with performance monitoring of the system level OS functions. Availability and fault monitoring will provide alerts and notification of such things as power supplies, hard disk failures, and other system level components. Performance monitoring provides alerts and notifications when performance levels exceed preset thresholds on such functions as CPU utilization, memory utilization, disk utilization, and others.

Server Performance

Delivering 24x7 fault and availability monitoring of servers, reporting plus integration of alerts from deployed performance monitoring tools and technology

Main features include:

- 24x7 monitoring – including detection of loss of visibility, device status changes.
- Hardware failure if configured to forward traps.
- Maintain Database of monitored devices.
- Change Control for scheduled activity on monitored devices.
- Event correlation – reduces alerts generated during major outage.
- Web based portal – provides real time dashboard incident/problem identification by organization, location, priority and category.
- Alert integration from deployed monitoring technology.
- Advanced monitoring including threshold monitoring for server conditions and proactive alarm generation.
- Standard Reports:
 - Requests by priority (with drill down)
 - Requests by request area (with drill down)
 - Service level agreement (“SLA”) achievement (with drill down) NOTE: SLA criteria definition will be determined and mutually agreed upon by 'Client' and COMPUCOM during creation of service types.
 - Service level agreement achievement by support group.
 - Initial average speed of response reports per priority or request area
 - Average time to closure report per priority or request area
- Fault notification and basic triage
- Repair escalation and dispatch
- Standard reports plus server performance analysis/trends and recommendations for performance improvements.
- Automated Workflow processes and procedures will be established through mutual agreement of the customer and EOC.

Performance level support provides availability and fault monitoring, performance threshold monitoring, and performance trending and reporting. Performance Level Support utilizes tools and technology that is licensed and deployed by the EOC to provide the performance threshold alerts and performance data. The EOC is responsible for the capabilities of the deployed tools and technology; which provide the detail and effectiveness of the performance threshold alerts.

Each supported server and storage array can be monitored for performance threshold alerts. Performance threshold alerts are generated by implemented server agents that directly monitor the performance and utilization levels within the server or array. A priority level 1 or 2 level is set for each monitored performance

function. When the performance function exceeds a priority level, a SNMP alert is generated at that priority and sent to the EOC Management Probe described below (Implementation and Startup). The Problem Management System will open a Service Request for the Performance Alert. Automated Workflow processes and procedures will be established through mutual agreement of Client and EOC.

Server Clusters and Virtual Machines are logical Virtual Systems that function similar to discrete hardware based systems. Virtual Systems have much of the same issues as discrete systems. The Virtual Systems are allocated resources from discrete systems to perform system level functions. The allocated resources will have specific performance and utilization issues similar to discrete systems. Because of this, Virtual System require fault and performance monitoring as if they were discrete system. Virtual Systems can generate as many incident alerts as discrete system. There are times when Virtual Systems will generate incident alerts when the resident discrete systems do not have any problems.

Fault and performance monitoring of Virtual Systems will utilize performance monitoring and management tools and technology in the same way that the discrete systems will. Each Virtual System will need to be configured in the EOC Problem Management as if it were a discrete system.

Because Virtual Systems do not have discrete hardware it is not necessary to provide the same level of fault monitoring service that is provided for the discrete systems. When a problem occurs with a Virtual System, it is, generally a resource allocation issue on a discrete system, a System Administration issue within the Virtual System, or an OS issue within the Virtual System.

Systems that have been designated as “End Of Life” by the source vendor will be supported on a best effort basis.

Authorized and trained Client personnel will be able to utilize the support management system to perform real-time ad hoc queries to view virtually unlimited views of event, service performance, and other information. These reports are printable from a browser, and may be directed to a file for Client processing.

Reports that require customization will be provided upon request and review. Depending upon complexity, COMPUCOM reserves the right to provide Client an estimate of effort with fair charges to create and maintain these custom reports.

Server Premier Level Support

Premier Level Support provides availability and fault monitoring, performance threshold monitoring, performance trending and reporting, and remote problem resolution. This service may also incorporate tools and technology that Client has already implemented and is maintaining.

Server Premier

Delivering 24x7 fault and availability monitoring of servers, reporting plus integration of alerts from deployed EOC or Client technology and end-to-end problem resolution responsibility

Note: This service may attempt to utilize tools and technology that Client has already licensed and implemented. The success and value of this service may be dependant on the quality of the tools and technology and the implementation on the servers.

Main features include:

- 24x7 monitoring – including detection of loss of visibility, device status changes.
- Hardware failure if configured to forward traps.
- Maintain Database of monitored devices.
- Change Control for scheduled activity on monitored devices.
- Event correlation – reduces alerts generated during major outage.
- Web based portal – provides real time dashboard incident/problem identification by organization, location, priority and category.

- Alert integration from EOC deployed monitoring technology.
- Where desired by Client, alert integration from deployed Client monitoring technology (Enhanced)
- Advanced monitoring including threshold monitoring for server conditions and proactive alarm generation.
- OS administration
 - Access Administration
 - Standard Server OS Management
 - Server Resource Allocation and Management
 - SAN Resource Allocation and Management
 - OS and system level administration changes based on Client approved Change Requests through the EOC Change Management System
 - End-to-end responsibility for OS and system level administration; isolation, change management and repair escalation and dispatch
- OS minor update and patch support
 - Management of Version and Patch DB
 - Quarterly “Push” of approved updates and patches
 - “Push” of approved critical security OS patches
 - “Push” of approved critical function system management and firmware patches
 - Attempted remediation of updates and patches where a “push” fails or an update or patch causes other problems with OS, System Management, or Applications.
 - Security/Hot Fixes are applied quarterly
 - Major revisions/upgrades, increased functionality require SOW to define scope and associated costs.
 - Utilization of the EOC Change Management process
 - Standard and Historical Reports
- Problem Resolution Management
 - Identify specific resources to resolve problems based on predetermined resolution responsibilities
 - Notification of identified resolution resources by predetermined procedures
 - Establish conference calls to share information between resolution resources
 - Drive the problem resolution process
 - Document and track resolution process and resources
 - Additional Problem Specific Reports
- End-to-end responsibility for problem detection, isolation, problem management,
- Remote problem resolution
- Repair escalation and dispatch
- Standard Reports:
 - Requests by priority (with drill down)
 - Requests by request area (with drill down)
 - Service level agreement (“SLA”) achievement (with drill down) NOTE: SLA criteria definition will be determined and mutually agreed upon by ‘Client’ and COMPUCOM during creation of service types.
 - Service level agreement achievement by support group.
 - Initial average speed of response reports per priority or request area
 - Average time to closure report per priority or request area
- Server performance analysis/trends and recommendations for performance improvements.
- OS administration, update and patch historical reports
- Automated Workflow processes and procedures will be established through mutual agreement of the customer and EOC.

Remote problem resolution attempts to resolve all problems with the server systems to the extent that hardware and OS problems that can be resolved without requiring actual physical presence or repair. This includes restarts, remote disk rebuilds, reallocation of OS and bandwidth resources to provide continued operation in case of a failure and the remediation of resources after a physical hardware repair. When an incident alert is received by the EOC Problem Management System a Service Request will be opened and assigned initially to the EOC for resolution. Each problem will be tracked and the problem resolution verified before the Service Request for that problem is closed.

Each supported server and storage array will be monitored for performance threshold alerts. Performance threshold alerts are generated by implemented server agents that directly monitor the performance and utilization levels within the server or array. A priority level 1 or 2 level is set for each monitored performance function. When the performance function exceeds a priority level, a SNMP alert is generated at that priority and sent to the EOC Management Probe. The Problem Management System will open a Service Request for the Performance Alert. Priority level 1 incidents will be resolved while priority 2 performance issues will be handled through the pre-defined workflow.

Server Clusters and Virtual Machines are logical Virtual Systems that function similar to discrete hardware based systems. Virtual Systems have much of the same issues as discrete systems. The Virtual Systems are allocated resources from discrete systems to perform system level functions. The allocated resources will have specific performance and utilization issues similar to discrete systems. Because of this, Virtual Systems require fault and performance monitoring as if they were discrete system. Virtual Systems can generate as many incident alerts as discrete system. There are times when Virtual Systems will generate incident alerts when the resident discrete systems do not have any problems.

Fault and performance monitoring of Virtual Systems will utilize performance monitoring and management tools and technology in the same way that the discrete systems will. Each Virtual System will need to be configured in the EOC Problem Management as if it were a discrete system.

Because Virtual Systems do not have discrete hardware it is not necessary to provide the same level of Premier Level service that is provided for the discrete systems. When a problem occurs with a Virtual System, it is, generally a resource allocation issue on a discrete system, a System Administration issue within the Virtual System, or an OS issue within the Virtual System.

In the situations where physical repair is required, a repair request will be escalated to the appropriate personnel to complete the repair. When there are not on-site personnel available the appropriate personnel will be dispatched. The EOC will verify the repair before the repair personnel are released and the Service Request will then be closed.

Remote problem resolution will differ for different types of systems. Blade servers will be supported like standard stand alone servers except for the functions provided by the blade server chassis. A data storage array will be monitored all faults including power supplies, individual disk drive failures, disk utilizations, array management system faults, and array data communications issues. LAN and Fibre Channel Storage Area Network switches will be monitored for physical linkage faults, port and switch faults and configuration or utilization issues. To the extent that each of the different problems that occur within the supported systems can be resolved remotely, the EOC will perform the problem resolution.

Systems that have been designated as “End Of Life” by the source vendor will be supported on a best effort basis.

In problem situations that involve configuration, performance or utilization issues, a Change Request will be opened and a SysAdmin level change will be performed to resolve the issue. The Service Request that initiates a Change Request will be closed only after the requested change has been verified to resolve the problem.

Authorized and trained Client personnel will be able to utilize the problem management system to perform real-time ad hoc queries to view virtually unlimited views of event, service performance, and other information. These reports are printable from a browser, and may be directed to a file for Client processing.

Reports that require customization will be provided upon request and review. Depending upon complexity, COMPUCOM reserves the right to provide Client an estimate of effort with fair charges to create and maintain these custom reports.

Network Device Basic Fault and Availability Monitoring

Basic Fault Monitoring provides availability monitoring and SNMP fault alert monitoring and problem management. Predetermined workflow and procedures will be performed based on mutual agreement between Client and the EOC.

Network Device Basic

24x7 fault and availability monitoring of network devices

Main features include:

- 24x7 monitoring – including detection of loss of visibility and device status changes.
- Maintain Database of monitored devices
- Change Control for scheduled activity on monitored devices
- Event correlation – reduces alerts generated during major outage.
- Web based portal – provides real time dashboard incident/problem identification by organization, location, priority and category.
- Standard Set of Reports
 - Requests by priority (with drill down)
 - Requests by request area (with drill down)
 - Service level agreement (“SLA”) achievement (with drill down) NOTE: SLA criteria definition will be determined and mutually agreed upon by ‘Client’ and COMPUCOM during creation of service types.
 - Service level agreement achievement by support group.
 - Initial average speed of response reports per priority or request area
 - Average time to closure report per priority or request area
- Fault notification and basic triage
- Repair escalation and dispatch

The supported network devices will be polled for availability using ICMP “ping” on a regular elapsed time schedule. When a network device does not respond, repeated polls will occur. If the network device responds the incident is considered closed. If the network device does not respond, an incident alert is generated and a service request is opened. Continuing attempts to poll the device will continue until the device responds.

Based on the support requirements for the network device, additional fault alerts from network device vendor’s SNMP management functions are activated. Fault alerts cover port failure, memory faults, power supply failures, cpu faults and any other hardware level faults that are provided by the vendor. The fault alerts are forwarded to the EOC Management Probe.

The alert will be processed through the alert integration and problem management systems and a Service Request opened. Based on the defined Workflow processes and procedures, the Service Request will be escalated to appropriate support personnel. If on-site personnel are not available then the appropriate personnel will be dispatched to affect a repair of the faulted network device.

Systems that have been designated as “End Of Life” by the source vendor will be supported on a best effort basis.

Authorized and trained Client personnel will be able to utilize the problem management system to perform real-time ad hoc queries to view virtually unlimited views of event, service performance, and other information. These reports are printable from a browser, and may be directed to a file for ‘Client processing.

Reports that require customization will be provided upon request and review. Depending upon complexity, COMPUCOM reserves the right to provide Client an estimate of effort with fair charges to create and maintain these custom reports.

Network Device Performance Level Support

Performance Level Support provides availability and fault monitoring, performance threshold monitoring, and performance trending and reporting. Performance Level Support utilizes tools and technology that is licensed and deployed by the EOC to provide the performance threshold alerts and performance data. The EOC is responsible for the capabilities of the deployed tools and technology; which provide the detail and effectiveness of the performance threshold alerts.

Network Device Performance

Delivering 24x7 availability and fault monitoring of network bridges, switches, and routers plus performance threshold monitoring and reporting

Main features include:

- 24x7 monitoring – including detection of loss of visibility and device status changes.
- Maintain Database of monitored devices
- Change Control for scheduled activity on monitored devices
- Event correlation – reduces alerts generated during major outage.
- Web based portal – provides real time dashboard incident/problem identification by organization, location, priority and category.
- Standard Set of Reports
 - Requests by priority (with drill down)
 - Requests by request area (with drill down)
 - Service level agreement (“SLA”) achievement (with drill down) NOTE: SLA criteria definition will be determined and mutually agreed upon by ‘Client’ and COMPUCOM during creation of service types.
 - Service level agreement achievement by support group.
 - Initial average speed of response reports per priority or request area
 - Average time to closure report per priority or request area
- Advanced monitoring including threshold monitoring for network conditions and proactive alarm generation.
- Fault notification and basic triage
- Repair escalation and dispatch
- Standard reports plus network performance analysis/trends and recommendations for performance improvements.

Each supported network device will be monitored for performance threshold alerts. Performance threshold alerts are generated by implemented tools and technology that monitor the performance and utilization levels within the network device. A priority level 1 or 2 level is set for each monitored performance function. When the performance function exceeds a priority level, a SNMP alert is generated at that priority and sent to the EOC Management Probe described below (Implementation and Startup). The Problem Management System will open a Service Request for the Performance Alert. Automated Workflow processes and procedures will be established through mutual agreement of the customer and EOC.

Performance trending reports are generated from the threshold alerts that are received by the EOC. A standard set of reports are generated and made available through the Web Portal. The trending reports can be used to provide information that may be used to upgrade the existing equipment and network architecture or to help define the requirements to redesign the network implementation.

Systems that have been designated as “End Of Life” by the source vendor will be supported on a best effort basis.

Authorized and trained Client personnel will be able to utilize the problem management system to perform real-time ad hoc queries to view virtually unlimited views of event, service performance, and other information. These reports are printable from a browser, and may be directed to a file for ‘Client processing.

Reports that require customization will be provided upon request and review. Depending upon complexity, COMPUCOM reserves the right to provide Client an estimate of effort with fair charges to create and maintain these custom reports.

Network Device Premier Level Support

Premier Level Support provides availability and fault monitoring, performance threshold monitoring, performance trending and reporting, and remote problem resolution and full resolution management. When an incident alert is received by the EOC Problem Management System a Service Request will be opened and assigned initially to the EOC for resolution.

Network Device Premier

Delivering 24x7 availability and fault monitoring of network bridges, switches, and routers; performance threshold monitoring and reporting; plus end-to-end problem resolution responsibility

Main features include:

- 24x7 monitoring – including detection of loss of visibility and device status changes.
- Maintain Database of monitored devices
- Change Control for scheduled activity on monitored devices
- Event correlation – reduces alerts generated during major outage.
- Web based portal – provides real time dashboard incident/problem identification by organization, location, priority and category.
- IOS update and patch management
 - Maintain an image of the current IOS for each supported asset
 - “Push” Client certified IOS updates and patches quarterly
 - Regularly check to verify the correct IOS image is operational on each supported asset
 - Provide access to the correct IOS image should a supported asset be repaired or replaced with an identical device
 - Updates and patches will be implemented through the EOC Change Management system
- Problem Resolution Management
 - Identify specific resources to resolve problems based on predetermined resolution responsibilities
 - Notification of identified resolution resources by predetermined procedures
 - Establish conference calls to share information between resolution resources
 - Drive the problem resolution process
 - Document and track resolution process and resources
 - Problem Specific Reports
- Standard Set of Reports
 - Requests by priority (with drill down)
 - Requests by request area (with drill down)
 - Service level agreement (“SLA”) achievement (with drill down) NOTE: SLA criteria definition will be determined and mutually agreed upon by ‘Client’ and COMPUCOM during creation of service types.
 - Service level agreement achievement by support group.
 - Initial average speed of response reports per priority or request area
 - Average time to closure report per priority or request area
- Advanced monitoring including threshold monitoring for network conditions and proactive alarm generation.
- Standard reports plus network performance analysis/trends and recommendations for performance improvements.
- SAN management and problem resolution.
- Identification and resolution of utilization and configuration faults
- Physical link and hardware faults
- Fault notification, triage and attempted remote resolution and restoration of services
- Repair escalation and dispatch only when remote resolution attempts can not resolve problems

- End-to-end responsibility for problem detection, isolation, problem management, problem resolution and repair escalation and dispatch

Remote problem resolution attempts to resolve all problems with the network systems to the extent that hardware and IOS problems that can be resolved without requiring actual physical presence or repair and does not require changes to the architecture and design of the network. This includes restarts, remote disk rebuilds, reallocation of IOS and bandwidth resources to provide continued operation in case of a failure and the remediation of resources after a physical hardware repair. Each problem will be tracked and the problem resolution verified before the Service Request for that problem is closed.

In the situations where physical repair is required, a repair request will be escalated to the appropriate personnel to complete the repair. When there are not on-site personnel available the appropriate personnel will be dispatched. The EOC will verify the repair before the repair personnel are released and the Service Request is closed.

Remote problem resolution will differ for different types of network devices. Bridges and single stack switches do not have the complexity of backplane based switches and routers. For Example:

An incident may be caused by a problem with IOS or firmware that has been identified by the vendor. Known errors may be addressed by simple restart of the network device. Full problem resolution may require patching of the IOS or firmware. With certification of the patch by Client, the EOC can implement the patch to resolve the problem through Change Management.

To the extent that each of the different problems that occur within the supported systems can be resolved remotely, the EOC will perform the problem resolution. Systems that have been designated as “End Of Life” by the source vendor will be supported on a best effort basis.

In problem situations that involve configuration, performance or utilization issues, a Change Request will be opened and a SysAdmin level change will be performed to resolve the issue. If a system upgrade is required to resolve the problem, Client will be informed and requested to supply the required upgrade. The Service Request that initiates a Change Request will be closed only after the requested change has been verified to resolve the problem.

Authorized and trained Client personnel will be able to utilize the problem management system to perform real-time ad hoc queries to view virtually unlimited views of event, service performance, and other information. These reports are printable from a browser, and may be directed to a file for Client processing.

Reports that require customization will be provided upon request and review. Depending upon complexity, COMPUCOM reserves the right to provide Client an estimate of effort with fair charges to create and maintain these custom reports.

End of Appendix C